Supreme Court, U.S.
FILED

101

08-445 OCT 3 - 2008

OFFICE OF THE CLERK
William K. Suter, Clerk

No. _____

IN THE

Supreme Court of the United States

FINISAR CORPORATION,

Petitioner,

v.

THE DIRECTV GROUP, INC., DIRECTV HOLDINGS LLC, DIRECTV ENTERPRISES LLC, DIRECTV OPERATIONS LLC, HUGHES NETWORK SYSTEMS, INC., AND DIRECTV, INC.,

Respondents.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

PETITION FOR A WRIT OF CERTIORARI

LARRY R. LAYCOCK
Counsel of Record
CHARLES L. ROBERTS
C.J. VEVERKA
DAVID R. TODD
WORKMAN NYDEGGER
1000 Eagle Gate Tower
60 East South Temple
Salt Lake City, Utah 84111
Telephone: (801) 533-9800

STANLEY J. PANIKOWSKI
DLA PIPER US LLP
401 B Street, Suite 1700
San Diego, California 92101
Telephone: (619) 699-2643

Attorneys for Finisar Corporation

October 3, 2008

QUESTION PRESENTED

35 U.S.C. § 112, paragraph 2 requires a patent to have a specification that "conclude[s] with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." Paragraph six of that statute explicitly allows language in such claims to "be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof," and then requires such language to be "construed to cover the corresponding structure, material, or acts described in the specification...." Paragraph one requires the specification to "contain a written description of the invention, and the manner and process of making and using it, in such...terms as to enable any person skilled in the art to which it pertains...to make and use the same...." The question presented is:

> When a patent claim refers to a "means" for performing a function and the patent specification discloses that the "structure" for carrying out that function is a computer, should the plain language of 35 U.S.C. § 112, paragraph 6 require the claim to be construed to cover a computer performing that function, or should a special judicially-created rule for computer-implemented functions hold all such claims invalid unless the patent specification further discloses a specific "algorithm" for carrying out that function, even when such an algorithm could be easily implemented by a "person skilled in the art"?

CORPORATE DISCLOSURE STATEMENT

Petitioner Finisar Corporation ("Finisar") has no parent corporation, and no other publicly held company owns more than 10% of its stock.

TABLE OF CONTENTS

QUESTION PRESENTED i
CORPORATE DISCLOSURE STATEMENT ii
TABLE OF CONTENTS iii
TABLE OF AUTHORITIES v
PETITION FOR A WRIT OF CERTIORARI 1
OPINIONS BELOW 1
JURISDICTIONAL STATEMENT 1
STATUTORY PROVISIONS 2
STATEMENT OF THE CASE 3
REASONS FOR GRANTING THE PETITION 11
I. The Federal Circuit's Rule Contradicts The Plain Language of 35 U.S.C. § 112, ¶ 6 12
II. The Federal Circuit's Rule Is Inconsistent With Other Statutory Provisions And Upsets The Carefully Balanced Scheme Implemented In The Patent Act 12
III. The Federal Circuit's Rule Improperly Creates Stricter Disclosure Requirements For Computer Technologies Than For Other Types of Technologies 14
IV. The Federal Circuit's Rule Upsets Public Expectations Because It Contradicts Previous Precedents Involving Computer-Implemented Functions 17
V. The Federal Circuit's Rule Will Continue To Give Rise To Recurring Problems If Not Corrected Now 20
CONCLUSION 22

APPENDIX A 1a

Opinion, *Finisar Corp. v. DIRECTV Group, Inc.*, 523 F.3d 1323 (Fed. Cir. 2008)

APPENDIX B 39a

Claim Construction Order, *Finisar Corp. v. DIRECTV Group, Inc.*, 416 F.Supp.2d 512 (E.D. Tex. 2006)

APPENDIX C 66a

Order Granting Summary Judgment of Invalidity, *Finisar Corp v. DIRECTV Group, Inc.*, Civil Action No. 1:05-CV-264 (E.D. Tex. May 2, 2006)

APPENDIX D 70a

Order Denying Petition for Rehearing and Rehearing En Banc, *Finisar Corp v. DIRECTV Group, Inc.*, Appeal Nos. 07-1023, 07-1024 (Fed. Cir. May 29, 2008)

TABLE OF AUTHORITIES

CASES

Alcatel USA Resources, Inc. v. Microsoft Corp., No. 06-CV-500, 2008 WL 2625852 (E.D. Tex. June 27, 2008) 21

Aristocrat Technologies Australia Pty Ltd. v. International Game Technology, 521 F.3d 1328 (Fed. Cir. 2008) ..... passim

CBT Flint Partners, LLC v. Return Path, Inc., 566 F.Supp.2d 1363 (N.D. Ga. 2008) 21

Civix-DDI, LLC v. Microsoft Corp., 84 F.Supp.2d 1132 (D. Colo. 2000) 20

Exxon Research & Engineering Co. v. United States, 265 F.3d 1371 (Fed. Cir. 2001) 4

Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722 (2002) 17, 20

Finisar Corp. v. DIRECTV Group, Inc., 416 F.Supp.2d 512 (E.D. Tex. 2006) 1, 7

Finisar Corp. v. DIRECTV Group, Inc., 523 F.3d 1323 (Fed. Cir. 2008) ..... passim

Gobeli Research, Ltd. v. Apple Computer Inc., 384 F.Supp.2d 1016 (E.D. Tex. 2005) 20

Hochstein v. Microsoft Corp., No. 04-CV-73071, 2008 WL 4104332 (E.D. Mich. Sept. 2, 2008) 21

In re Donaldson Co., 16 F.3d 1189 (Fed. Cir. 1994) (en banc) 5

In re Dossel, 115 F.3d 942 (Fed. Cir. 1997) 18

In re Miller, 441 F.2d 689 (CCPA 1971) 4, 13

In re Noll, 545 F.2d 141 (CCPA 1976) 17, 18

Intel Corp. v. VIA Technologies, Inc., 319 F.3d 1357 (Fed. Cir. 2003) 16, 19

Ives v. Hamilton, 92 U.S. 426 (1875) 4

KSR International Co. v. Teleflex Inc., 550 U.S. ___, 127 S.Ct. 1727 (2008) 3

Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996) 3

Medical Instrumentation & Diagnostics Corp. v. Elekta AB, 344 F.3d 1205 (Fed. Cir. 2003) 19

National Recovery Technologies, Inc. v. Magnetic Separation Systems, Inc., 166 F.3d 1190 (Fed. Cir. 1999) 4

Personalized Media Communications, LLC v. International Trade Commission, 161 F.3d 696 (Fed. Cir. 1998) 19

S3, Inc. v. nVIDIA Corp., 259 F.3d 1364 (Fed. Cir. 2001) 15, 16

Smith v. Hall, 301 U.S. 216 (1937) 3

South Corp. v. United States, 690 F.2d 1368 (Fed. Cir. 1982) (en banc) 18

Titanium Metals Corp. v. Banner, 778 F.2d 775 (Fed. Cir. 1985) 3

Warner-Jenkinson Co. v. Hilton Davis Chemical Co., 520 U.S. 17 (1997) 4, 5

Webster Loom Co. v. Higgins, 105 U.S. 580 (1881) 4

WMS Gaming, Inc. v. International Game Technology, 184 F.3d 1339 (Fed. Cir. 1999) 9

STATUTES

28 U.S.C. § 1254 2
28 U.S.C. § 1295 8
28 U.S.C. § 1338 6
35 U.S.C. § 102 ..... 3, 13
35 U.S.C. § 103 ..... 3, 13
35 U.S.C. § 112 ..... passim

OTHER AUTHORITIES

R. Trevor Carter, Practising Law Institute, *Ramifications of Recent Decisions on Business Method and Software Patents*, 899 PLI/Pat 813 (2007) 20

PETITION FOR A WRIT OF CERTIORARI

Finisar Corporation hereby respectfully petitions this Court to issue a writ of certiorari to review the judgment of the United States Court of Appeals for the Federal Circuit in this case.

OPINIONS BELOW

The opinion accompanying the judgment for which review is sought is reported at *Finisar Corp. v. DIRECTV Group, Inc.*, 523 F.3d 1323 (Fed. Cir. 2008), which affirms the district court's grant of summary judgment that certain claims of Finisar's U.S. Patent No. 5,404,505 ("the '505 patent") are invalid for indefiniteness. The Federal Circuit's opinion is reproduced in the Petition Appendix at pages 1a-38a. The Federal Circuit's May 29, 2008 order denying rehearing and rehearing *en banc* is unreported and is reproduced at pages 70a-71a. The February 17, 2006 opinion of the United States District Court for the Eastern District of Texas construing the claims of the '505 patent and concluding that the claims at issue are indefinite is reported at 416 F.Supp.2d 512 and is reproduced at pages 39a-65a. The district court's May 2, 2006 order granting summary judgment of invalidity for the claims at issue is unreported and is reproduced at pages 66a-69a.

JURISDICTIONAL STATEMENT

The United States Court of Appeals for the Federal Circuit entered its judgment and opinion on

April 18, 2008, and denied Finisar's timely combined petition for rehearing and rehearing *en banc* on May 29, 2008. On August 19, 2008, Chief Justice Roberts extended the time to file a petition for a writ of certiorari to September 26, 2008, and on September 16, 2008, Chief Justice Roberts further extended the time to file a petition to October 17, 2008. Application No. 08A144. This Court has jurisdiction over this matter pursuant to 28 U.S.C. § 1254(1).

STATUTORY PROVISIONS

35 U.S.C. § 112, entitled "Specification," provides in pertinent part:

> [¶1] The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.
>
> [¶2] The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
>
> *******
>
> [¶6] An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall

be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

STATEMENT OF THE CASE

1. 35 U.S.C. § 112 requires a patent to have a "specification." Pursuant to section 112, paragraph 1, the specification must first include "a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains...to make and use the same." Paragraph 2 then requires the specification to conclude "with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." The scope of the patent right depends on the breadth of the language used in the patent's claims. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 373 (1996).

A claim's scope, in turn, determines whether the claim is infringed and/or invalid. Generally speaking, if a patent claim is so broad as to cover what has already been done or disclosed (*i.e.*, so broad as to cover "the prior art"), it is invalid for lack of novelty. *See* 35 U.S.C. § 102; *Smith v. Hall*, 301 U.S. 216 (1937); *Titanium Metals Corp. v. Banner*, 778 F.2d 775 (Fed. Cir. 1985). Or, if a patent claim is so broad as to cover obvious modifications to the prior art, the claim is invalid for obviousness. 35 U.S.C. § 103(a); *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, 127 S.Ct. 1727 (2008). If a patent claim requires a broadly specified element but the

specification does not provide sufficient disclosure for an ordinarily skilled artisan to implement the full scope of that element without undue experimentation, then the specification fails to meet the requirements of section 112, paragraph 1 and the claim is said to be invalid for lack of enablement. *See Webster Loom Co. v. Higgins*, 105 U.S. 580, 582-92 (1881); *Ives v. Hamilton*, 92 U.S. 426, 431-32 (1875); *National Recovery Technologies, Inc. v. Magnetic Separation Systems, Inc.*, 166 F.3d 1190 (Fed. Cir. 1999). And, finally, if a patent claim is so vague that it is "insolubly ambiguous," it is invalid for failure to meet the requirement of section 112, paragraph 2 to "particularly point[] out and distinctly claim[] the subject matter which the applicant regards as his invention" and is said to be invalid for "indefiniteness." *Exxon Research & Engineering Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001). Of course, "breadth is not to be equated with indefiniteness." *In re Miller*, 441 F.2d 689, 693 (CCPA 1971).

Section 112, paragraph 6 allows language in claims to be in a certain format, commonly called "means-plus-function format." Specifically, paragraph 6 states that language in claims "may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof." As this Court explained in *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 520 U.S. 17, 27 (1997), "under this... provision, an applicant can describe an element of his invention by the result accomplished or the function served, rather than describing the item or element to be used (*e.g.*, 'a means of connecting Part A to Part B,' rather than 'a two-penny nail')." When

such means-plus-function language is used, paragraph 6 further requires that the claim language be "construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." If the specification does not disclose *any* structure for performing the required function, then the claim cannot be construed as paragraph 6 requires and the claim is therefore held invalid for indefiniteness. *In re Donaldson Co.*, 16 F.3d 1189, 1195 (Fed. Cir. 1994) (en banc).

Thus, to expand on the Court's example in *Warner-Jenkinson*, if a claim used language requiring "a means of connecting Part A to Part B," and if the specification disclosed "a two-penny nail" as a structure that could be used to connect Part A to Part B, then the claim language would be construed to cover "a two-penny nail and equivalents thereof." Alternatively, if the specification more generically disclosed that "a nail"—rather than "a two-penny nail"—could be used to connect Part A to Part B, then the claim language would be construed more broadly to cover "a nail and equivalents thereof." If the specification did not disclose *any* structure for connecting Part A to Part B, then the claim language could not be construed as paragraph 6 requires, and hence the claim would be invalid for indefiniteness.

2. Finisar is the owner of U.S. Patent No. 5,404,505 ("the '505 patent"). Claim 1 of the '505 patent covers "[a]n information transmission system" comprising several elements in combination. One of these elements is expressed in means-plus-function language. Specifically, claim 1 requires "database editing means...for generating a hierarchically arranged set of indices for referencing data in [an]

information database...and for embedding said indices in said information database." Pet. App. 35a. As the district court explained, the "indices" described in the '505 patent specification are simply "pieces of digital information...used to refer to specific items of information within the database." Pet. App. 46a-48a. Claim 37 has identical means-plus-function language as claim 1 except that it does not require "hierarchical" indices.

The '505 patent specification discloses a structure for performing the "generating" and "embedding" functions. Referring to Figure 1 of the patent, the specification states: "[S]oftware 132 (executed by CPU 130) generates a hierarchical set of indices referencing all of the data in the information database 112 and embeds those indices in the information database." Pet. App. 35a-36a, 50a. In other words, the structure disclosed for performing the "generating" and "embedding" functions is a "CPU" (a "central processing unit," *i.e.*, a computer) programmed with "software" that generates and embeds indices. There was no dispute, at least at the summary judgment stage, that an ordinary computer programmer at the time of the filing of the patent would have known how to create computer software that would perform the "generating" and "embedding" functions.

3. Finisar sued Respondents (collectively "DIRECTV") in the United States District Court for the Eastern District of Texas, alleging infringement of the '505 patent. The district court had jurisdiction under 28 U.S.C. § 1338(a). Finisar alleged infringement of two sets of claims. The first set ("the system claims") comprised claims 1, 2, 7, 9, 10, 11,

and 37, which cover "[a]n information transmission system." The second set ("the method claims") comprised claims 16, 17, 22, 24, 25, 26, 39, and 44, which cover "[a]n information transmission method."

The district court first issued an opinion interpreting and construing the language of the claims. With respect to the means-plus-function element in claims 1 and 37, the district court concluded that "this claim term is indefinite because no structure is disclosed for performing the recited function." Pet. App. 51a. Despite the plain language of 35 U.S.C. § 112, paragraph 6 and the indisputable fact that a "CPU" *is* a "structure," the district court did not construe the means-plus-function element in claims 1 and 37 to cover a CPU programmed to perform the "generating" and "embedding" functions. Instead, it believed the Federal Circuit's case law to hold that when "[a] function is computer implemented, the patent must disclose an algorithm to be performed by the computer to accomplish the recited function." Pet. App. 49a. The district court reasoned that the disclosed "CPU" was either not considered "structure" at all or was not sufficient structure because the patent "describes no algorithm, formula, or series of steps performed by the computer to accomplish the function of generating indices and embedding them." Pet. App. 50a. The district court did not point to any requirement in 35 U.S.C. § 112 for an "algorithm."

DIRECTV then moved for summary judgment that all of the system claims were invalid because they all required the means-plus-function language that the district court had previously determined to be indefinite. The district court granted summary

judgment that the system claims were invalid for indefiniteness. Pet. App. 6a, 66a-69a. This was in spite of affidavit testimony in the record demonstrating that an ordinary computer programmer at the time of the filing of the patent would have known how to create computer software that would perform the "generating" and "embedding" functions. Dkt. Nos. 43, 67, 87.

The case then proceeded to trial on all but one of the remaining method claims. Pet. App. 6a-7a. The jury found the method claims to be valid and infringed, and the district court therefore entered final judgment for Finisar. Pet. App. 6a-7a.

4. DIRECTV appealed to the Federal Circuit, and Finisar cross appealed from, *inter alia*, the district court's grant of summary judgment that the means-plus-function system claims were invalid for indefiniteness. The Federal Circuit had jurisdiction over the appeals pursuant to 28 U.S.C. § 1295(a)(1). The Federal Circuit vacated the final judgment and remanded the case for further proceedings with respect to the method claims, but affirmed the district court's grant of summary judgment that the means-plus-function system claims were invalid for indefiniteness. Pet. App. 34a-37a. The Federal Circuit's mandate issued on June 5, 2008, and the case is now proceeding on remand with respect to the remaining method claims. This petition challenges only the Federal Circuit's judgment with respect to the means-plus-function system claims.

In reviewing the district court's grant of summary judgment on the means-plus-function system claims, the Federal Circuit first recognized that the specification did disclose a "CPU" executing software

as structure for performing the "generating" and "embedding" functions. Pet. App. 35a-36a. The Federal Circuit then relied on its own case law for the following premise: "For computer-implemented means-plus-function claims where the disclosed structure is a computer programmed to implement an algorithm, 'the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm.'" Pet. App. 36a (quoting *WMS Gaming, Inc. v. International Game Technology*, 184 F.3d 1339, 1349 (Fed. Cir. 1999)). In other words, the Federal Circuit's premise was that when a computer and an algorithm *are* disclosed, a means-plus-function element should be construed to cover the computer as programmed with that algorithm. The Federal Circuit then reasoned from this premise that an algorithm *must* therefore be disclosed: "Thus the patent must disclose, at least to the satisfaction of one of ordinary skill in the art, enough of an algorithm to provide the necessary structure under § 112, ¶ 6." Pet. App. 36a. The Federal Circuit did not explain why its conclusion was required—as a matter of logic—by its premise, nor did it attempt to reconcile its conclusion with the plain language of section 112.

The Federal Circuit then gave controlling weight to its three-week-old decision in *Aristocrat Technologies Australia Pty Ltd. v. International Game Technology*, 521 F.3d 1328 (Fed. Cir. 2008). Pet. App. 37a. The Federal Circuit repeated the following statement from its decision in *Aristocrat*:

> For a patentee to claim a means for performing a particular function and then to

> disclose only a general purpose computer as the structure designed to perform that function amounts to pure functional claiming. Because general purpose computers can be programmed to perform very different tasks in very different ways, simply disclosing a computer as the structure designated to perform a particular function does not limit the scope of the claim to 'the corresponding structure, material, or acts' that perform the function, as required by section 112 paragraph 6.

Pet. App. 37a. The Federal Circuit did not explain why "claim[ing] a means for performing a particular function and then...disclos[ing] only a general purpose computer" constituted "pure functional claiming," particularly where "a general purpose computer" is clearly not a "pure function[]" but is instead a "structure." Nor did it explain its assertion that construing means-plus-function claim language to be limited to "a computer and equivalents thereof" (as section 112, paragraph 6 requires) would "not limit the scope of the claim." Instead, blindly following its decision in *Aristocrat*, the Federal Circuit affirmed the district court's grant of summary judgment that the means-plus-function system claims were invalid.

Finisar petitioned for rehearing and rehearing *en banc*, pointing to the indisputable fact that a "CPU" is "a structure" and to the plain language of section 112, paragraph 6, which both demonstrate that the system claims are not "vague" or "indefinite" but can (and must) be construed to cover a CPU programmed to carry out the "generating" and "embedding"

functions. Finisar further explained that the system claims were also not invalid for lack of enablement because there was no dispute that an ordinary computer programmer would know how to program a computer to carry out the "generating" and "embedding" functions. The Federal Circuit denied the petition without comment. Pet. App. 70a-71a.

5. Both Finisar and Aristocrat are concurrently filing petitions for certiorari in this Court on October 3, 2008.

REASONS FOR GRANTING THE PETITION

This petition presents the same issue that is presented in *Aristocrat Technologies Australia Pty Ltd. v. International Game Technology*, No. 08-____ (petition filed Oct. 3, 2008). The Court should grant the petition in the *Aristocrat* case for all of the reasons set forth in that petition and in this petition. Because the Federal Circuit in this case gave controlling weight to its decision in the *Aristocrat* case, Finisar submits that the most efficient course would be for this Court to hold this petition pending its disposition of the *Aristocrat* case and then dispose of this petition accordingly.

For example, if the *Aristocrat* petition is granted and the Federal Circuit's judgment in that case is reversed, vacated, or otherwise modified, the Court should then grant this petition, vacate the judgment of the Federal Circuit in this case, and remand to the Federal Circuit for further proceedings consistent with its decision in the *Aristocrat* case.

I. The Federal Circuit's Rule Contradicts The Plain Language of 35 U.S.C. § 112, ¶ 6

The Federal Circuit's decision in this case and in the *Aristocrat* case should be reviewed (and rejected) for several reasons. First and most significantly, the decisions in *Aristocrat* and in this case completely ignore the plain language of section 112, paragraph 6. The statute allows (indeed, requires) a means-plus-function element to be construed if there is *any* disclosure of "structure, material, or acts" for performing the claimed function. A "CPU" or a "computer" is clearly a "structure." The Federal Circuit has imposed an unwarranted, judicially-created requirement that there be further disclosure of an "algorithm" for computer-implemented functions. The statute plainly only requires a "structure." It does not require an "algorithm." There should be no judicially-created exception for computer-implemented functions. The Federal Circuit should not be allowed to depart from the plain language of a statute simply because it deems its rule to be better than that established by Congress. This is a situation in which the Federal Circuit "has so far departed from the accepted usual course of judicial proceedings...as to call for an exercise of this Court's supervisory power." Sup.Ct.R. 10(a).

II. The Federal Circuit's Rule Is Inconsistent With Other Statutory Provisions And Upsets The Carefully Balanced Scheme Implemented In The Patent Act

The decisions in *Aristocrat* and in this case not only ignore the plain language of section 112,

paragraph 6, but they also misread the other paragraphs of section 112 and are inconsistent with the carefully balanced Congressional scheme implemented in the Patent Act for assessing validity. This error is revealed by the Federal Circuit's reference to its new rule as a requirement for "definiteness." There is nothing "indefinite" (*i.e.*, vague) about construing a means-plus-function element to cover "a computer programmed to perform the 'generating' and 'embedding' functions." It is a relatively straightforward exercise to determine whether an accused system (or a prior art system) contains a computer and whether that computer is running software that is "generating" and "embedding" indices. There is nothing vague about the claim at issue here.

The Federal Circuit's reasoning both in *Aristocrat* and in this case reveals that the Federal Circuit's real concern is not about *clarity* but about *breadth*. But "breadth is not to be equated with indefiniteness." *In re Miller*, 441 F.2d 689, 693 (CCPA 1971).

Congress has established a system in which a claim's breadth is policed with other provisions. As discussed above, if the entire combination required by the claim, as properly construed, were so broad as to cover the "prior art," then the claim would be invalid for *lack of novelty* under 35 U.S.C. § 102. If the combination were so broad as to cover modifications that would have been obvious in light of the "prior art," then the claim would be invalid for *obviousness* under 35 U.S.C. § 103. If an ordinary computer programmer would not be able to program a computer to perform the "generating" and

"embedding" functions without further disclosure of an algorithm for performing those functions, the claim would be invalid for *lack of enablement* under 35 U.S.C. § 112, paragraph 1. The only reason that the claim should be held invalid for *indefiniteness* under section 112, paragraph 2 is if a person of ordinary skill could not understand the meaning of the "generating" and "embedding" functions or if the specification did not disclose *any* structure for performing those functions such that the mandate of paragraph 6 could not be followed. Here, however, there is no dispute that an ordinary computer programmer could program a computer to perform the "generating" and "embedding" functions without disclosure of an algorithm, there is no dispute that the "generating" and "embedding" functions can be understood, and there can be no dispute that a "CPU" is a "structure."

Thus, the Federal Circuit's assertion that the lack of an "algorithm" results in "indefiniteness" is not only contrary to the plain language of section 112, paragraph 6, but it is also inconsistent with the other provisions of section 112 and the other provisions governing validity. Hence, the Federal Circuit's rule upsets the carefully balanced scheme for policing patent validity that Congress has implemented in the Patent Act.

III. The Federal Circuit's Rule Improperly Creates Stricter Disclosure Requirements For Computer Technologies Than For Other Types of Technologies

The Federal Circuit's decisions in the *Aristocrat* case and in this case improperly create a special,

judicially-created rule for computer-implemented functions that does not apply to functions implemented with other types of technology. The result is a stricter disclosure requirement for computer-implemented functions, in complete derogation of the disclosure requirements set forth by Congress in section 112. Section 112 does not set up special disclosure requirements for different technologies. Rather, it simply and elegantly requires sufficient disclosure "as to enable any person skilled in the art to which [the invention] pertains, or with which it is most nearly connected, to make and use the same." The statute contains no justification for discriminating against computer-implemented functions.

The Federal Circuit's case law involving other technologies does not require the additional detail that is now required for computer-implemented means-plus-function elements. For example, in *S3, Inc. v. nVIDIA Corp.*, 259 F.3d 1364, 1370 (Fed. Cir. 2001), the claim required "digital-to-analog converter means...for selectively receiving either [a] video information data stream or [a] video display information data stream [and] converting the received data to analog video signals." The specification disclosed the structure for performing the function broadly as "a selector." *Id.* The Federal Circuit noted that "the electronic structure of the selector and the details of its electronic operation are not described in the specification." *Id.* The district court granted summary judgment that the claim was invalid for indefiniteness because details regarding the selector were not disclosed. *Id.* at 1367, 1370. The Federal Circuit reversed, holding that such

details were not required, in language that should be equally applicable to this case:

> The law is clear that patent documents need not include subject matter that is known in the field of the invention and is in the prior art, for patents are written for persons experienced in the field of the invention. To hold otherwise would require every patent document to include a technical treatise for the unskilled reader. Although an accommodation to the "common experience" of lay persons may be feasible, it is an unnecessary burden for inventors and has long been rejected as a requirement of patent disclosures.
>
> The uncontradicted evidence was that a selector is of well known electronic structure and performs a common electronic function, and is readily implemented from the description in the specification. There was no contrary evidence. It is not the criterion for compliance with § 112, whether a lay person having no skill whatsoever in this field would know how a selector is constructed. Thus, the ruling in invalidity for failure to comply with § 112 is incorrect, and must be reversed.

Id. at 1371 (citations omitted); *see also Intel Corp. v. VIA Technologies, Inc.*, 319 F.3d 1357, 1365-67 (Fed. Cir. 2003) (rejecting argument that means-plus-function element was indefinite "because no circuitry is disclosed in the patent"). If there is no requirement that the details of a "selector" be disclosed in order to comply with the requirements of section 112 when those details could be easily

implemented by a person of ordinary skill in the field of electronics, then there should also be no requirement that the algorithmic details of a programmed "computer" be disclosed when an ordinary computer programmer could easily implement such an algorithm. However, the Federal Circuit's rulings in this case and in the *Aristocrat* case unjustifiably hold that computer-implemented functions must be held to a stricter and higher standard of disclosure.

IV. The Federal Circuit's Rule Upsets Public Expectations Because It Contradicts Previous Precedents Involving Computer-Implemented Functions

The *Aristocrat* decision and the decision in this case have upset the public's expectations and have set the law in disarray, because the rule is inconsistent with the Federal Circuit's own precedent, even in computer-implemented means-plus-function cases. *See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 739 (2002) ("[C]ourts must be cautious before adopting changes that disrupt the settled expectations of the inventing community.").

For over thirty years, since a time when computer technology was still in its infancy, the Federal Circuit's precedent has not required the disclosure of an algorithm for computer-implemented functions in order to avoid indefiniteness—until now. In *In re Noll*, 545 F.2d 141 (CCPA 1976), the Federal Circuit's predecessor court (the Court of Customs

and Patent Appeals)* rejected an argument that a means-plus-function claim was invalid for indefiniteness for failure to disclose "the detailed internal structure of the computer as programmed." *Id.* at 149. The court had no difficulty construing the means-plus-function elements at issue to "encompass the means described in the specification, *i.e.*, the specified programmed general purpose computer, and equivalents thereof." *Id.*

In *In re Dossel*, 115 F.3d 942 (Fed. Cir. 1997), the Federal Circuit reversed the Patent Office's rejection of a means-plus-function claim for indefiniteness. The Board of Patent Appeals and Interferences had determined that the specification lacked a disclosure of *any* structure for performing the claimed function. *Id.* at 944. The Federal Circuit concluded that although the specification did not expressly disclose that a computer would be used to perform the claimed function, it was apparent that the function "must be implemented by or on a general or special purpose computer." *Id.* at 947. Significantly, the Federal Circuit had previously explained that the specification "does not disclose exactly what mathematical algorithm will be used," *id.* at 946, but found this to be of no significance in reversing the indefiniteness rejection, *id.* at 947. In future cases, the Federal Circuit repeatedly characterized its decision in *Dossel* as construing the means-plus-function element to cover a general-purpose computer without the requirement for any particular

---

* The Federal Circuit has adopted the decisions of the Court of Customs and Patent Appeals as binding precedent. *South Corp. v. United States*, 690 F.2d 1368, 1369 (Fed. Cir. 1982) (en banc).

algorithm. *Intel Corp. v. VIA Technologies, Inc.*, 319 F.3d 1357, 1366 (Fed. Cir. 2003) ("[I]n *In re Dossel*, ...the structure corresponding to the 'reconstructing' function...was determined to be a general-purpose computer."); *Personalized Media Communications, LLC v. International Trade Commission*, 161 F.3d 696, 700 n.5 (Fed. Cir. 1998) ("[I]n *Dossel* we held, on 'specific facts,' a means-plus-function claim not invalid for indefiniteness under § 112, ¶ 2 even though the algorithmic structure corresponding to 'means for reconstructing' was not specifically disclosed in the written description.").

Finally, in *Medical Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1210-19 (Fed. Cir. 2003), the patentee attempted to demonstrate that the specification disclosed software (to be run on a general-purpose computer) as structure for performing the "converting" function in a means-plus-function element. However, the Federal Circuit determined that there was no disclosure stating that the function could be performed by software. *Id.* Significantly, however, the Federal Circuit then commented that *if* the disclosure had explained that the function could be performed by software, then "there would be no need for a disclosure of the specific program code" as long as "one skilled in the art would know the kind of program to use." *Id.* at 1214.

Thus, with its decisions in *Aristocrat* and this case, the Federal Circuit has unjustifiably departed from a long line of cases in which the public has been told that a general-purpose computer without disclosure of any "algorithm" or "specific program code" can qualify as the structure for performing the

function required by a means-plus-function element, especially when a person of ordinary skill in the art of computer programming would know how to implement such a function. The Federal Circuit's new rule to the contrary is a marked departure from its previous precedents and has upset the "settled expectations of the inventing community." *Festo*, 535 U.S. at 739.

V. The Federal Circuit's Rule Will Continue To Give Rise To Recurring Problems If Not Corrected Now

The Federal Circuit's failure to follow the plain language of 35 U.S.C. § 112 in this case does not present an isolated problem. The issue is a recurring one and therefore needs to be resolved correctly at the earliest possible time. It is no coincidence that two cases presenting this very same issue were decided by the Federal Circuit within three weeks of each other (this case and the *Aristocrat* case). A number of reported decisions from past district court cases further confirm that the issue is a frequent one. *See, e.g., Gobeli Research, Ltd. v. Apple Computer Inc.*, 384 F.Supp.2d 1016, 1022-23 (E.D. Tex. 2005) (holding means-plus-function claim indefinite for failure to disclose algorithm as corresponding structure); *Civix-DDI, LLC v. Microsoft Corp.*, 84 F.Supp.2d 1132, 1147 (D. Colo. 2000) (holding means-plus-function claim should not fail for indefiniteness although an algorithm was not disclosed); R. Trevor Carter, Practising Law Institute, *Ramifications of Recent Decisions on Business Method and Software Patents*, 899 PLI/Pat 813, 822-28 (2007) (collecting district court cases addressing the sufficiency of structure in mean-plus-

function claims involving computer-implemented functions).

Moreover, in the few short months since the Federal Circuit has decided the *Aristocrat* case and this case, the Federal Circuit's rule has already been applied in at least three further cases to invalidate patents for failure to disclose an algorithm. *Hochstein v. Microsoft Corp.*, No. 04-CV-73071, 2008 WL 4104332 (E.D. Mich. Sept. 2, 2008) (granting summary judgment that means-plus-function claim was invalid for indefiniteness for failure to disclose an algorithm, relying on *Aristocrat* and *Finisar*); *CBT Flint Partners, LLC v. Return Path, Inc.*, 566 F.Supp.2d 1363 (N.D. Ga. July 10, 2008) (holding a means-plus-function claim invalid for indefiniteness because the specification failed to disclose an algorithm for performing a computer-implemented function, relying on *Aristocrat*); *Alcatel USA Resources, Inc. v. Microsoft Corp.*, No. 06-CV-500, 2008 WL 2625852, at *13-17 (E.D. Tex. June 27, 2008) (holding a means-plus-function claim involving software executed on a processor invalid for indefiniteness because the specification did not disclose "sufficient algorithmic structure," relying on *Aristocrat* and *Finisar*).

The Federal Circuit's special, judicially-created rule ignoring the plain language of section 112 and discriminating against computer-implemented functions will continue to give rise to recurring problems if it is not corrected by this Court. As such, this Court should grant certiorari and not allow the Federal Circuit's erroneous rule to stand.

CONCLUSION

For the reasons set forth above, the Court should grant the petition in *Aristocrat Technologies Australia Pty Ltd. v. International Game Technology*, No. 08-____ (petition filed Oct. 3, 2008) and hold the petition in this case pending a decision in the *Aristocrat* case. The Court should then grant this petition and dispose of it in accordance with the Court's decision in the *Aristocrat* case.

Respectfully submitted,

LARRY R. LAYCOCK
Counsel of Record
CHARLES L. ROBERTS
C.J. VEVERKA
DAVID R. TODD
WORKMAN NYDEGGER
1000 Eagle Gate Tower
60 East South Temple
Salt Lake City, Utah 84111
Telephone: (801) 533-9800

STANLEY J. PANIKOWSKI
DLA PIPER US LLP
401 B Street, Suite 1700
San Diego, California 92101
Telephone: (619) 699-2643

Attorneys for Finisar Corporation
October 3, 2008